

## REMARKS

### A. Background

Claims 1-3, 5-11, and 13-18 were pending in the application at the time of the Office Action. The Office Action rejected claims 17 and 18 under 35 USC § 112, first and second paragraphs, respectively. Claims 17 and 18 was also rejected as being anticipated or obvious over cited prior art. By this response applicant has amended claims 17 and 18. As such, claims 1-3, 5-11, and 13-18 are presented to the Examiner for consideration in light of the following remarks.

### B. Proposed Claim Amendments

Claim 17 was amended to remove “comprising or” from the preamble. Claim 18 was amended to address typographical errors. In view of the foregoing, applicant submits that the amendments to the claims do not introduce new matter and entry thereof is respectfully requested.

### C. Claim Rejections

Paragraphs 2 and 3 of the Office Action rejected claim 17 under 35 USC § 112, first paragraph, on grounds that the specification, while being enabling for an isolated allele consisting of any of SEQ ID NOs : 1-36, does not reasonably provide enablement for the entire chromosome on which the alleles of the instant invention reside. In response to the rejection, applicant has amended claim 17 from “one or more isolated alleles comprising or consisting of” to “one or more isolated alleles consisting of.” In view of the fact that claim 17 has been amended to only claim the one or more isolated alleles which consists of the identified sequences, applicant submits that claim 17 is supported by the specification and requests that the rejection under 35 USC § 112, first paragraph, be withdrawn.

Paragraphs 4 and 5 of the Office Action rejected claim 18 under 35 USC § 112, second paragraph, as being indefinite. Specifically, the Office Action requested that applicant correct some typographical errors in claim 18. By this response applicant has amended claim 18 as proposed in the Office Action. As such, applicant respectfully requests that the rejections under 35 USC § 112, second paragraph, be withdrawn.

Paragraphs 6 and 7 of the Office Action rejected claim 17 under 35 USC § 102(b) as being anticipated by Barber et al. (1996). The Office Action asserted that Barber teaches an isolated allele comprising the sequence (AGAA)<sub>8</sub>. By this response, applicant has amended claim 17 to remove the “comprising” language therefrom. Furthermore, applicant submits that the Barber reference does not disclose an isolated allele “consisting” of a sequence selected from a defined group which includes (AGAA)<sub>8</sub>. As such, applicant respectfully submits that claim 17 is not anticipated by the Barber reference.

Paragraphs 8-10 of the Office Action rejected claim 18 under 35 USC § 103(a) as being unpatentable over Barber in view of U.S. Patent No. 5,559,663 to Shuman et al. Claim 18 depends from claim 17 and thus incorporates the limitations thereof. As such, applicant respectfully submits that claim 18 is distinguished over the prior art for substantially the same reasons as discussed above with regard to claim 17.

No other objections or rejections are set forth in the Office Action.

#### D. Conclusion

In view of the foregoing, applicant respectfully requests the Examiner reconsideration and allowance of claims 1-3, 5-11, and 13-18 as amended and presented herein.

In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Dated this 10th day of September 2003.

Respectfully submitted,



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